

**Request to Archive  
With The National Centers for Environmental Information  
For Climate Forecast System Reanalysis - Lite (CFSR-lite)  
Provided by NCEP**

**2011-09-28**

This information will be used by NCEI to conduct an appraisal and make a decision on the request.

**1. Who is the primary point of contact for this request?**

wesley ebisuzaki

NCEP

meteorologist

301 763-8000 x7576

wesley.ebisuzaki@noaa.gov

**2. Name the organization or group responsible for creating the dataset.**

**3. Provide an overview summarizing the scope of data you want to archive. Describe the outputs, data variables, including their measurement resolution and coverage.**

A reanalysis of the atmosphere, ocean using a 3-d var coupled model. This is a "lite" version of the CFSR which is run at a lower atmospheric resolution and updated model and data assimilation. The atmospheric coverage is global, 1x1 degree grid, from the period 1948-present with a 6 hour resolution. The ocean analysis is global with a 0.5x0.5 degree grid with a daily average analyses. The inputs include in situ data and satellite data.

**4. What is the time period covered by the dataset? (YYYY-MM-DD, YYYY-MM or YYYY)**

From 1948-01-01

Ongoing as continuous updates to the data record

**5. Edition or version number(s) of the dataset:**

**6. Describe the level to which the data are processed. For example, are these unprocessed raw observations, derived parameters, quality controlled or inter-calibrated data, etc.?**

The observations are assimilated using the GSI (gridded statistical interpolation) system which uses the GFS (global forecast system) and MOM4 (modular ocean model) for the forecasts. The analyses are derived and quality control is both an explicit part of the GSI and through the non-linear weighting of the observations.

**7. Approximate date when the dataset was or will be released to the public:**

**8. Who are the expected users of the archived data? How will the archived data be used?**

Users: meteorologists, climatologists, wind energy, agriculture.

Uses: studies of weather, evaluation of wind energy, probabilities of weather occurrences (agriculture, insurance).

**9. Has the dataset undergone user evaluation and/or an independent review process? Did NCEI participate in design reviews?**

No

**10. Describe the dataset's relationship to other archived datasets, such as earlier versions or related source data. If this is a new version, how does it improve upon the previous version(s)?**

CFSR is a higher resolution product covering the satellite era (1979-present). The CFSR-lite covers 3 more decades albeit at a lower resolution. The CFSR-lite include improvements in the forecast model and the data assimilation system.

**11. List the input datasets and ancillary information used to produce the data.**

Same as existing NCDC archive (CFSR)

**12. List web pages and other links that provide information on the data.**

grib2 metadata (WMO standard)

**13. List the kinds of documents, metadata and code that are available for archiving. For example, data format specifications, user guides, algorithm documentation, metadata compliant with a standard such as ISO 19115, source code, platform/instrument metadata, data/process flow diagrams, etc.**

1. GRIB2: [http://www.nco.ncep.noaa.gov/pmb/docs/grib2/grib2\\_doc.shtml](http://www.nco.ncep.noaa.gov/pmb/docs/grib2/grib2_doc.shtml)

**14. Indicate the data file format(s).**

1. GRIB2

**15. Are the data files compressed?**

grib2-complex packing

**16. Provide details on how the files are named and how they are organized (e.g., file\_name\_pattern\_YYYYMM.tar in monthly aggregations).**

ATRAC is limiting the number of files  $\leq 1000$ . Files need to be updated on a monthly basis.  $66 \text{ years} * 12 \text{ mon/year} = 792$ . CFSRL.YYYYMM.grb2 YYYY=year, MM=month.

**17. Explain how to access sample data files and/or a file listing for previewing. If it is not available now, when will it be available?**

Sample/preliminary data and inventories are available by request ([wesley.ebisuzaki@noaa.gov](mailto:wesley.ebisuzaki@noaa.gov)).

**18. What is the total data volume to be submitted?**

**19. Are later updates, revisions or replacement files anticipated? If so, explain the conditions for submitting these additional data to the archive.**

No additional updates, revisions or replacement data are anticipated.

**20. Describe the server that will connect to the ingest server at NCEI for submitting the data.**

Physical Location: Camp Springs, MD, 20746

System Name: cpcannex.ncep.noaa.gov

System Owner: NCEP

Additional Information: Add comments as needed on applicable data types, etc.

**21. What are the possible methods for submitting the data to NCEI? Select all that apply.**

1. FTP PUSH

**22. Identify how you would like NCEI to distribute the data. Web access support depends on the resources available for the dataset.**

1. Direct HTTP/FTP

2. Web Service

**23. Will there be any distribution, usage, or other restrictions that apply to the data in the archive?**

No known constraints apply to the data.

**24. Discuss the rationale for archiving the dataset and the anticipated benefits. Mention any risks associated with not archiving the dataset at NCEI.**

This reanalysis covers a period longer than the Climate Forecast System Reanalysis (1979-present) and forecasts skill scores suggest that the analyses are more accurate.

**25. Are the data archived at another facility or are there plans to do so? Please explain.**

No

**26. Is there an existing agreement or requirement driving this request to archive? Have you already contacted someone at NCEI?**

No

**27. Do you have a data management plan for your data?**

No

**28. Have funds been allocated to archive the data at NCEI?**

No

**29. Identify the affiliated research project, its sponsor, and any project/grant ID as applicable.**

**30. Is there a desired deadline for NCEI to archive and provide access to the data?**

Archive by:

Accessible by:

**31. Add any other pertinent information for this request.**

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